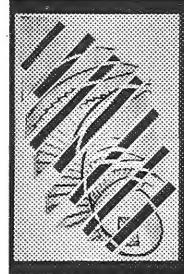
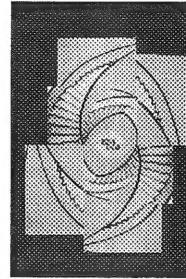


ANN GRADY ONE SHARP EDGE

# genesis of new mastery



H. HANLON  
BLACK & WHITE  
PHOTOCOPY  
COLLAGES



The theme of this issue is **PERCEPTION / APPLICATION**. It was selected to recognize the profusion of perceptual experiences in the realm of artists using science and technology. The second factor suggests the multiplicity of applications exhibited by these artists.

A general meaning of **PERCEPTION** is the process of becoming aware, experiencing with the senses, and apprehending with the mind. It is an active, selective and complex process of sensing and structuring the stimulation of the environment. Our interest here focuses on aspects of that environment produced by artists using science and technology.

**APPLICATION** refers to employment for a special purpose or use: also relevance. The ideas and images in this issue are a sampling of the rich variety of stimulating experiences/applications offered by Ylem artists,

The intensity and caliber of our perceptions define the significance of our ideas. The use of science and technology in art and design is turning aesthetics upside-down. We are experiencing an incomparable aesthetic circumstance. We recognize an electronic "countenance" in the production of the ever-accumulating art rushing our senses. When adrift in these images, one questions at times if an aesthetic has yet developed for the new imagery.

This issue of Ylem offers a selection, both verbal and visual, of **PERCEPTION / APPLICATION**. It surveys architectural installation, printmaking, textile design, documentary photography, art education, and more. Perhaps these works will assist our journey toward a new aesthetic in arts which use science and technology.

**mary stieglitz**  
GUEST EDITOR

# brains, perception and consciousness

WEDNESDAY,  
NOVEMBER 13, 7:30 PM

MCBEAN THEATRE, THE EXPLORATORIUM  
3601 LYON ST. • SAN FRANCISCO, CA 94123

CONTACT: TRUDY MYRRH REAGAN  
415-856-9593; [trudymyrrh@aol.com](mailto:trudymyrrh@aol.com)

**HOW DOES SEEING BECOME KNOWING?** This is a subject that piques artists' interest. We will hear from some distinguished researchers and see a video that plays on our perceptions. What is consciousness? Can there be "planetary consciousness"? An artist and an author will probe these questions.

## neural pathways to perception

**MICHAEL STRYKER** will discuss how patterns of neural activity in the eyes and brain guide the development of connections to the visual cortex during early life. This mechanism allows neurons to connect with one another with essentially perfect precision. He will also discuss how fragile the visual system can be during one of its critical periods, and he will show examples of the distortions of neural connections that

give rise to distorted vision. Finally, he will discuss the pathways in the brain that are thought to be responsible for object recognition,

and what appears to be taking place when we learn to recognize new objects.

Stryker is a neurobiologist who, together with his students, studies the development of the visual cortex and its inputs. He is Chairman of the Department of Physiology at UCSF.

## totem of heavenly wisdom

**TAMIKO THIEL** will show a 2D computer graphic simulation of a new video installation in the Totem Project, the *Totem of Heavenly Wisdom*. Using the eye of the video camera to view the human body through a Rorschach filter, she transforms the innocent body into a sign stimulus that leads the viewers' minds into their own inner depths.

Thiel studied Product Design at Stanford, human/computer interfaces at the MIT Media Lab, and fine art in Munich, Germany. Past projects have included the physical design of a parallel supercomputer and a virtual reality playground (with Steven Spielberg) for seriously ill children, and the Totem Project, a series of installations that create votive images for the distant future.

## the autostereogram

**CHRISTOPHER W. TYLER, PH. D.** has long been interested in the mysteries of 3D vision and was lucky enough to work at Bell Labs with Bela Julesz, father of the random-dot stereogram. In 1979, he conceived the idea of using the classic

wallpaper effect to program the free-viewing repetitive stereograms that have been popularized by *Magic Eye* books and many others. This kind of work epitomizes the interface between art and visual science which has been a continued source of inspiration.

Tyler is Associate Director of the *Smith-Kettlewell Eye Research Institute* in San Francisco, an independent organization devoted to the study of vision, brain processing, eye diseases and devices for the blind.

## an essential mystery: brains imagine

**TRUDY MYRRH REAGAN** presents her new painting by this name on the subject of consciousness. To say more would spoil the surprise.

She is the founder of Ylem, and is an artist incorporating science images and ideas in her art. Her "Essential Mysteries" series treats intriguing subjects that scientists investigate but will probably never "solve."

## from the silk road to the silicon road: east meets west in cyberspace

**ALEXANDER BESHER** explores how the planet can evolve into a new template of collective consciousness.

Besher is a San Francisco-based journalist, novelist and futurist. Born in China, raised in China, he is the author of *Rim: A Novel of Virtual Reality*, which was nominated for the Philip K. Dick Award in 1994. Film and interactive rights have been acquired by TriStar Pictures for Blue Wolf Productions. Besher is currently completing a sequel to *Rim*, entitled *Mir*, with a third novel in the series, *Chi's Children*, to follow. Besher recently completed a "meditation entertainment" a "meditainment" entitled @: *A Virtual Tale of the Coming Millennium* with two collaborators, Pamela Engebretson and Françoise Bollerot. He wrote an internationally syndicated column, "Pacific Rim" for seven years, and is the author of *The Pacific Rim Almanac*.

The forum is free, open to the public and wheelchair accessible.

# microcosmos, macrocosmos

JANUARY 5-31,  
10AM - 4PM M-F

OPENING: SUNDAY,  
JANUARY 12, 2-5PM

The artists will talk about their work 2-3 pm, followed by a reception, 3-5 pm

## CANESSA GALLERY

708 MONTGOMERY ST. • SAN FRANCISCO, CA 94111 • 415-296-9029

**YLEM PRESENTS** the following artists in exhibit that treats patterns in nature: SHOSHANA DUBINER, GRANT ELLIOT, MICHAEL MCGUIRE, MYRRH, MARGARET ASTRID PHANES, BARBARA PLOWMAN and ROGER FERRAGALLO. More details in January Newsletter!

# ylem exhibit

# siggraph 1996 new orleans

june | july | august | september | october | november | december | january

by danielle gaines

**SIGGRAPH 1996** was exciting in many ways, from Silicon Graphics displaying its motion sensor capabilities through an entertainment venue (what else) to hot new software and other innovations in the computer graphics arena. I was able to interview the following *Ylem members* attending and exhibiting there:

#### LYNN POCOCK

Lynn teaches in the Department of Computer Graphics & Interactive Media at Pratt Institute in New York. During SIGGRAPH '96, she juried for the Electric Theatre and the Artist/Designer Sketches. Lynn is an artist with specializations in print, photography and two-dimensional computer graphics. Most of her work is in experimental animation.

When asked where she sees the position of artists currently, Lynn replied, "When the technology area becomes more commonplace, the artist will have more of a voice...Physical art will never go away. When VR technology goes away, does the art go away? The definition of art will open up..."

And on the status of techno artists on the east coast: She informed me that virtual reality has made it into a New York venue *the Guggenheim museum* through an exhibit called "The Legible City" by Jeffrey Shaw. It was first shown during SIGGRAPH '89 and was actually promoted as a "new piece" at the recent Guggenheim exhibit. That seems to be the current east coast mentality on the partnership of art and technology. But hopefully with Lynn's hard work and determination, she will cross that barrier and bring awareness to the New York venue.

**Lynn's Major Goal:** Lynn is currently in the process of trying to bring SIGGRAPH '97 to New York, after the L.A. show. If she succeeds, the artist using science and technology succeeds in developing a strong presence on the east coast. Needless to say, the growing trend is definitely in partnering the artist with the technician. It's only a matter of time (and a lot of work).

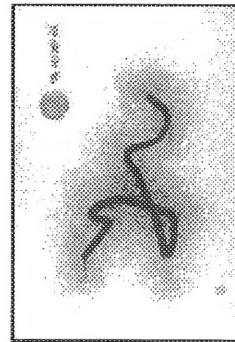
**Future Tripping:** Lynn is currently working on a show called "Ongoings" which will take an in-depth look at artists who have had a long-term presence in the computer graphics field. Also, in 1998 she will have an exhibit of her prints called "Linger: Things Left Behind" at New Jersey State Art Museum, Trenton, NJ

HELEN GOLDEN/JUDITH MONCRIEFF

#### UNIQUE EDITIONS

Helen and Judith, along with KARIN SCHMINKE, exhibited at the Guerrilla Gallery at SIGGRAPH. Unique Editions, to quote, is a group of five artists from across the country, who combine their expertise in traditional studio media and techniques with digital imaging to produce original fine art and editions.

The purpose of the Guerrilla Gallery was to allow artists to walk in and have their digital art printed out. Printers spewing out reproductions included the HP DesignJet 755CM. This printer is Helen's preferred choice. Helen's specializations include photography, sculpture, woodcut, etching and jewelry. Judi's specializations include painting, photography, design and teaching. Judi believes in opening up others to possibilities through her work. "In that kind of collaboration is growth."



ROMAN VEROVSKO  
ALGORITHMIC COMPUTER ART

**Goal:** The Unique Editions artists would like the fine art world to recognize them. They would also like to gain more support from the computer industry.

#### ROMAN VEROVSKO

Roman specializes in code-generated fine art and actually programs his own code that creates the art. He displayed extraordinary pieces using Chinese characters generated by the computer and then repeated them in various placement within geometric formats. "My work is about computing procedures," says Roman.

He decided to write code in order to have the *computer* as the generator of the art. Though the procedures have been created by Roman, he indirectly creates the actual artwork. He has been specializing in code-generated art for the past 12 years. The art relates to script and writing and displays the stroke of the Chinese character as the art. (His modified pen plotter can hold a Chinese brush).

#### CLIFFORD PICKOVER

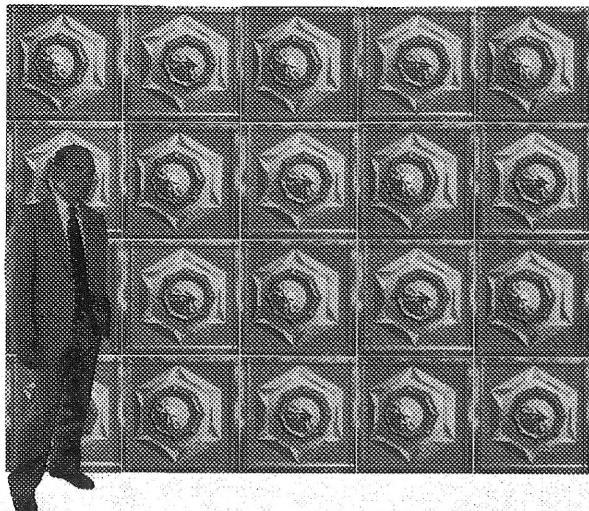
Cliff attended SIGGRAPH with his company, IBM. He displayed a self-made kaleidoscope, which, when pointed at his beautiful computer-generated fractals, created yet another dimension. Cliff's latest publication is called *Fractal Horizons*. I wrote a chapter for it, "Fractals in Fashion."

#### JEREMY SUTTON

Jeremy had a full schedule working at the Fractal Design exhibit by demonstrating Painter, as well as other FD graphics programs. He also presented during the Artist Sketches.

#### LOUIS BRILL

Louis was at SIGGRAPH taking notes, attending press conferences and gearing up for his writing assignments.



### roger ferragallo

This issue of *Ylem* is devoted to Perception/Application, the discussion of which I enter into from the point of view of an artist/designer. For the better part of 35 years I have been engaged in with the perceptual phenomena of *stereopsis*: *binocular vision* and its relationship to an aesthetics of space and form and its application.

Stereoscopic technology has had a stop-and-go rollercoaster ride for the last 158 years, since Wheatstone's monumental paper was published in 1838. His invention of the stereoscope and stereoscopic drawing, coinciding as it did with the invention of photography, led to an incredible array of stereo photographs, stereoscopes, and stereo literature throughout the 19th century — worldwide.

In the early hours of this century cheap paper photography, mass pictorial media and the 35mm photo format largely succeeded in smothering the high public excitement stereo photography created in the 19th century. Until the 1970s, poor quality cinema applications of stereo and the continued need for eyewear prevented this powerful medium from really developing.

The people who kept stereo alive during our 20th century *pre-computer* era were small bands of stereo-photographers who are still very active around the world. They were and are aficionados and keepers of the faith in a stereoscopic aesthetics.

I discovered such a group in Oakland during the mid-1960s at a time when I was teaching a unique art course I developed that concerned itself with *stereopsis* at Laney College. It was the start of my awakening to the implications of exploring seriously a stereo aesthetics as might be applied to painting and design.

A sabbatical year in 1960-70 in Iran led me to discover the stunning architectural tile expanses in the mosques I visited in Isfahan and Shiraz. This would have a major impact on my life both then and now.

When I returned from Iran I began an intense study of the literature on stereo space at the University of California. This and my earlier drawings led to a series of stereo acrylic canvases produced in 1972.

One major discovery that grew out of this early work echoed the experience in Iran. I began to explore the development of the contrapuntal, concave-convex, assemblages of (crystallographic) stereo-paired tile fields that I sought to apply to interior and exterior architecture. This would have to wait, however, for the time in the distance future when "free-viewing" large scale stereo paired visual forms might find their acceptance.

Thanks to the advent of the computer in the 1980s and to Bela Julesz's monumental book on stereopsis in 1972 which in the 1990s led to the RDS (free-vision) craze — time finally conspired to catch up with my earlier work. Through my good friend, stereo historian Harold Layer, and Wisconsin business partner John Kristoff, I was gratified to be contacted in 1993 by Gage Tile of Wisconsin, who set about producing two very large murals, one based on my painting "Apollo Mandala" (1972), and one, "Moonbase Six" (1994), which was computer generated. The murals measured eight by twenty feet and ten by forty feet, respectively, and were beautifully rendered lithographically with a jeweled, anodized and brushed treatment in colored aluminum as 24" individual tiles.

In June of this year "Moonbase Six" was installed on the ground floor entrance to the Stratosphere Tower in Las Vegas, covering 18,000 square feet of exterior and interior ceilings with 24" aluminum tiles.

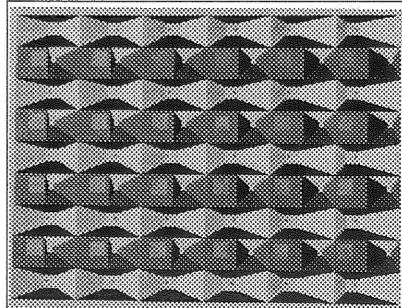
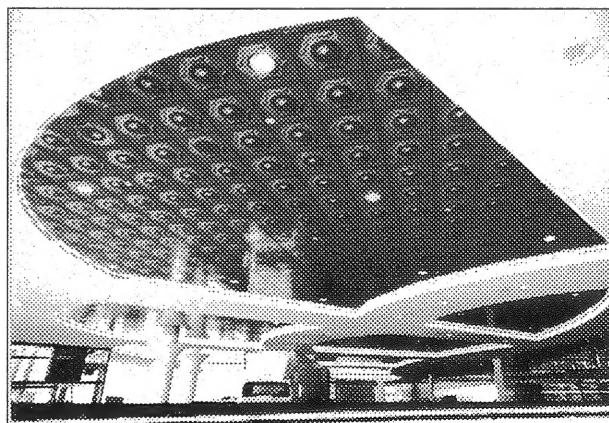
I am currently engaged in developing a series of computer generated stereoscopic tile assemblages in a business venture, centered in Wisconsin and New York, which will embrace both "free vision" aluminum tiles and other new stereo technologies and materials that will be directed towards architecture as well as to the applied arts generally.

C. Wheatstone,  
On Some  
Remarkable and  
Hitherto  
Unobserved  
Phenomena,  
Phil. Trans.  
Royal Soc.  
London, June  
21, 1838.

R. Ferragallo,  
On  
Stereoscopic  
Painting,  
Leonardo, Vol.  
7 No. 2, Spring  
1974.

R. Ferragallo,  
Stereoscopic  
Architectural  
Surfaces,  
Stereo World,  
Vol. 22, No. 1,  
Mar/Apr 1995.

## STEREOPSIS in art and design



UPPER LEFT  
ROGER FERRAGALLO  
MOONBASE SIX, 1995  
ALUMINUM MURAL

ABOVE  
ROGER FERRAGALLO  
MOONBASE SIX, 1996  
ENTRANCE OF  
STATOSPHERE  
TOWER, LAS VEGAS

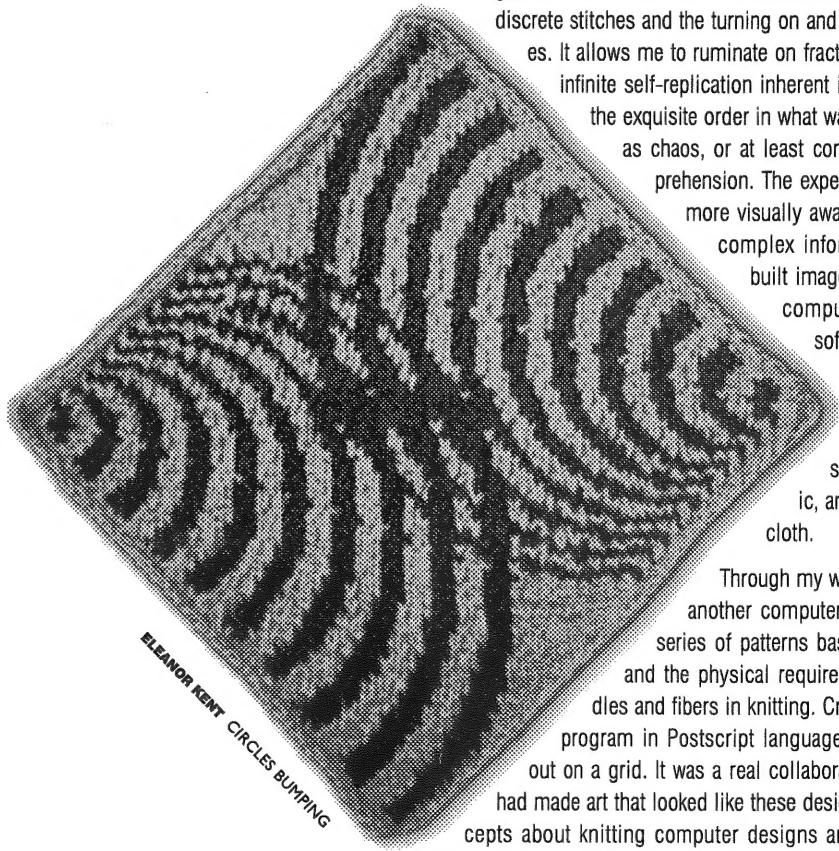
LEFT  
ROGER FERRAGALLO  
TRANSPOSITIONS,  
1972  
ACRYLIC STEREOPIIC  
CANVAS

# knitted algorithms | soft HARDCOPY

My work is a combination of handmade textiles and high technology: I knit fractal designs and mathematical formulae. I like the directness of making textiles of sensuous wool fibers that I can hold in my hands, but I also enjoy using computers as art tools to make screen images that can be saved and used later in different ways. I am attracted to the geometric figures that recur in art throughout the ages, and to the astonishing beauty of fractal designs, which historically were made visible only after the invention of computers.

Knitting with thick, soft wools and light silks gives me the pleasure of touching the material and also reminds me of the textile origins of computers in the Jacquard looms of France. By slowing down my hands I am able to observe and think about the complexities of fractals and to compare the building of designs by stitches and by pixels.

Although the correspondence of pixel to stitch is not precise in my wall hangings and scarves, the experience of translating the designs into knitted fabrics gives me an understanding of how computer images are constructed and illuminates the connection between discrete stitches and the turning on and off of electronic pulses. It allows me to ruminate on fractals as boundaries, the infinite self-replication inherent in fractal makeup, and the exquisite order in what was originally perceived as chaos, or at least complexity beyond comprehension. The experience also makes me more visually aware, better able to read complex information-laden, pixel-built images. Finally, by knitting computer designs, making soft hardcopy, I enjoy reconnecting the exhilarating discoveries of computer science with the mythic, ancient world of making cloth.



Through my work with Craig Cassin, another computer artist, we invented a series of patterns based on his algorithms and the physical requirements of hands, needles and fibers in knitting. Craig wrote the software program in Postscript language and printed designs out on a grid. It was a real collaboration, as neither of us had made art that looked like these designs before. I had concepts about knitting computer designs and Craig was able to translate these concepts into workable patterns. We plan to make these patterns available in a book.

In sum, I seek to combine electronic tools with the ancient art of textile-making to gain a coherent outlook that joins the future with the past and affirms that technology can be used peacefully, creatively and comfortably in our world.

eleanor kent  
SAN FRANCISCO, 1996

All events and exhibits are in the San Francisco Bay Area except where noted. List your event or exhibit here. Send to "Ylem Newsletter Items" address on back page.

Some calendar items are reprinted from *Art Calendar* (the monthly marketing and career management journal for artists, PO Box 199, Upper Fairmount, MD 21867. Subscriptions, \$32 p. year), *Leonardo Electronic Almanac*, *Artswire* ([www.artswire.org](http://www.artswire.org)), and *FineArts Forum Online* ([paul\\_brown@siggraph.org](mailto:paul_brown@siggraph.org)). We cannot verify all information sent to us. Readers, inform us of incorrect information, please.

## events

### THROUGH NOVEMBER 3

#### 16TH ANNUAL SCAN CONFERENCE (PHILADELPHIA, PA)

A small and artist-centered conference on art and computers. Franklin Institute Science Museum, Philadelphia; Small Computers in the Arts Network; <http://moonmilk.volcano.org/scan/>

### NOVEMBER 7, 7 PM

#### ALAN KAY LECTURE

In 1979 Kay, chief scientist of Xerox Corporation's bastion of information research, Xerox PARC (Palo Alto Research Center), and principal orchestrator of the world's first personal computer, invited Apple founder Steve Jobs to PARC to marvel at his creation. Five years later this historic visit resulted in the birth of the computer that would ignite the multimedia industry, the Apple Macintosh. San Francisco Museum of Modern Art, 3rd St. between Howard and Folsom, San Francisco, CA

### NOVEMBER 8, 7 PM

#### ARTIST IN RESIDENCE PROGRAM (PARC)

Rich Gold, manager of the Creative Documents Initiative at Xerox PARC, will present an overview of the program, which brings together professional artists and PARC researchers in ways that respect the work cultures and values of each group. Other participants in the program will be on a panel to discuss their goal of creating exciting art pieces, original technical ideas and providing a foundation for the area of aesthetics. Lecture series tickets \$20, including museum admission. Individual lecture tickets: \$6 at door.

**The Tech Museum of Innovation, 145 W. San Carlos St., San Jose, CA 95113; 408-279-7150; fax - 7167; ticket info: -7158**

### NOVEMBER 13, 7:30 PM

#### YLEM FORUM: BRAINS, PERCEPTION AND ART

Details, see page 3.

### NOVEMBER 16, 7:30 PM

#### MIDNIGHT MOVIE IMMERSION

Relive those glory days of *Rocky Horror Picture Show*, *Eraserhead*, *Liquid Sky*, etc. Revel in great moments of cheesy cult cinema on video, then make & premiere your own Warhol/Kuchar/Waters mini-epic, and cap it with a midnight visit to the Four Star Theater for a showing of Troma Films' *The Hotel Manor Inn*. Bring \$ for snacks, \$6.50 for theater admission.

Lurid Jim Kennedy, 564-9886; 426 Irving between 5th & 6th Aves., San Francisco, CA

### NOVEMBER 18-22

#### 4TH INTERNATIONAL MULTIMEDIA CONFERENCE AND EXHIBITION (BOSTON, MA)

International forum of panels, demos, exhibits, workshops. Hynes Convention Center, Boston, MA; <http://www.acm.org/sigmm/MM96/>

### NOVEMBER 18-22

#### ACM MULTIMEDIA '96 (BOSTON, MA)

Held at Hynes Convention Center, Boston, MA. The Fourth International Multimedia Conference and Exhibition. ACM Multimedia '96 will provide an international forum for papers, panels, videos, demonstrations, courses, workshops, and exhibits. Topics include applications in art, education, entertainment, government, medicine, etc.; collaboration environments; databases; digital libraries; documents and authoring; hardware and architectures; compression techniques; user interfaces; standards and legal issues; storage and I/O architectures; and virtual reality. <http://www.acm.org/sigmm/MM96/>

### NOVEMBER 21, 7 PM

#### AMORPHIC ROBOT WORKS

Chico MacMurtrie, whose troupe captivated the audience at The Tech's ground-breaking ceremonies in June, will bring anthropomorphic, kinetic sculpture to life. He performs amazing art from minimal wire form sculptures to full-blown operatic performances. Lecture series tickets \$20, including museum admission. Individual lecture tickets: \$6 at door.

**The Tech Museum of Innovation, 145 W. San Carlos St., San Jose, CA 95113; 408-279-7150; fax - 7167; ticket info: -7158**

### NOVEMBER 22, 8 PM

#### LAURIE ANDERSON LECTURE

She is the "artist-scientist" of our time, a technological alchemist transforming fragments of ordinary expression into digital haikus. Laurie Anderson clothes her penetrating social commentary with pulsating dance rhythms, Broadway-style theatrics, multi-image slide projections, hypnotic film imagery, and androgynous voice processing.

Yerba Buena Center for the Arts Forum, 3rd St. between Howard and Folsom, San Francisco, CA

### DECEMBER 10, 7 PM

#### HAL'S LEGACY ... BEYOND 2001: A SPACE ODYSSEY

Author Dr. David G. Stork discusses his newly released book *Hal's Legacy*, which explores the relationship between science fiction and technological fact. His book is based on the 1968 movie *2001: A Space Odyssey*. Dr. Stork will be available for book signings. Lecture series tickets \$20, including museum admission. Individual lecture tickets: \$6 at door.

**The Tech Museum of Innovation, 145 W. San Carlos St., San Jose, CA 95113; 408-279-7150; fax - 7167; ticket info: -7158**

## exhibits

### THROUGH NOVEMBER 10

#### METAMORPHOSSES

A national show of digital photography from the Whitney Museum. Includes Ylem member Diane Fenster. Also showing is "Pixel Perfect: Digital Photography in the Bay Area," which includes both Diane Fenster and Helen Golden.

**San Jose Museum of Art, 110 Market St., San Jose, CA; 408-271-6878**

### THROUGH NOVEMBER 25

#### 4TH ANNUAL DIGITAL SALON (NEW YORK CITY)

New York City's big digital art show, co-sponsored by NYC-SIGGRAPH and *Leonardo*. Sonya Rapoport is among the Ylem members in the show. Reception: 11/17, 6-8 pm; Computer Animation show 11/15, 11/16 8 pm in Visual Arts Ampitheater, 209 E. 23rd St. School of Visual Arts Gallery, 209 E. 23rd St., New York, NY

### THROUGH NOVEMBER 26

#### WORKS BY DENNIS SUMMERS

Ylem installation artist Dennis Summers explores themes of quantum physics and other scientific ideas presented in what appears to be "primitive" ikonic forms. Also read about his work in the current issue of *Leonardo* (Vol 29, no. 4).

Robert De Caprio Gallery,  
The Moraine Valley  
Community College, Palos  
Hills, IL; Summers' email:  
denniss@ic.net

**DECEMBER 3 – JANUARY 4**  
**DIGITAL ILLUSTRATION**  
**(NEW YORK CITY)**

The prestigious Society of  
Illustrators' first exhibit of digital  
work. Call for hours.  
212-838-2560

**THROUGH DECEMBER 29**  
**SCIENCE IMAGINED**

An exhibition of the book as art  
that explores the confluence of art  
and science. Nationally known  
book artists as well as books from  
Canada and Europe. Many of the  
books result from collaborations  
with scientists and the topics  
covered include: astronomy,  
anatomy, chemistry, engineering,  
genetics, medicine, magnetism,  
meteorology, natural sciences  
(from botany to zoology), psy-  
chology and physics. Other books  
focus on the method, philosophy  
and practice of science, biogra-  
phies of scientists and medita-  
tions on the relationships of sci-  
ence to art.

The Berkeley Art Center,  
1275 Walnut St. in Live Oak  
Park, 510-644-6893

**THROUGH DECEMBER 31**  
**LASERS, LIGHT & COLOR**

In a whirling kaleidoscope of color,  
light and scientific discovery, the  
Tech's new series of hands-on and  
interactive exhibits allow visitors to  
explore and understand rainbows,  
shadows and reflections, as well as  
discover innovative uses of lights  
in holograms, communications,  
medicine and much more.

The Tech Museum of  
Innovation, 145 W. San  
Carlos St., San Jose, CA  
95113; 408-279-7150; fax -  
7167

**THROUGH JANUARY 5**  
**CYCLES: NATURE  
REPEATS ITSELF**

Seasons, the reproductive cycle,

photosynthesis, earthquakes,  
fires—these are all examples of  
cycles. Cycles ensure the continuity  
of life, serve as markers of time,  
transform energy into usable  
forms, and recycle materials. They  
can also reverse growth trends that  
have reached a limit, in the case of  
violent cycle forms such as earth-  
quakes and fire. Yet cycles also  
create order and stability, as with  
population dynamics in ecosys-  
tems.

The Exploratorium, 3601  
Lyon St., San Francisco,  
94123;  
415-563-7327

**needs      offerings**

**NOVEMBER 2-3, & 11/09-11/10**  
**INTERMEDIATE PAINTER FOR**  
**PHOTOGRAPHS (SEASIDE, CA)**

Learn the fine art of digital imagery  
from one of the world's premier  
masters, S. Swaminathan.  
Enrollment limited to 25 people  
(one student per computer). In this  
intermediate workshop, learn how  
to apply Fractal Design Painter  
4.0's powerful tools to transform a  
photograph of your choosing. Go  
step by step through the creation  
of a complete painting, and pre-  
pare for fine art prints and Web  
publishing. Explore advanced fea-  
tures such as cloning, selective  
focus, sharpening and diffusion,  
background enhancement and spe-  
cial lighting effects. You will also  
learn how to use Painter to create  
an online portfolio of your work.  
\$495. Workshop held at California  
State University at Monterey Bay.  
Limited housing available. Call for  
details.

CSUMB, Painter Workshop—  
Flex, 100 Campus Center,  
Seaside, CA 93955-8001;  
to register: 408-582-3886;  
fax -3885; <http://www.monterey.edu/workshop>

**NOVEMBER 12**  
**FREE DIGITAL VIDEO**  
**SEMINAR**

Attend a free media 100 qx semi-  
nar and see how Media 100 qx can

help you achieve results you never  
thought would be within your  
reach. Whether you use QuickTime  
applications like Adobe Premiere,  
tape-based editing systems, or  
you're just getting into digital  
video, this new seminar will give  
you all the information you need to  
know about dramatic changes tak-  
ing place in the digital video mar-  
ketplace. Register soon; space is  
limited.

800-773-1770;  
[www.media100.com](http://www.media100.com)

**DECEMBER 23-30, 10 AM-5 PM**  
**TECH MUSEUM**  
**SPECIAL HOURS**

The museum will be open on  
Mondays during the winter holi-  
days.

The Tech Museum of  
Innovation, 145 W. San  
Carlos St.,  
San Jose, CA 95113;  
408-279-7150; fax -7167

**A REALLY EXTRAORDINARY**  
**HEAT EXCHANGER**

Operate your laser where access-  
ing water is difficult or not possi-  
ble. Conserve water. Save 2 1/2  
gallons of water per minute nor-  
mally required to cool your laser.  
King Kool is a closed-loop laser  
water cooling system. It is avail-  
able in either a single or dual radi-  
ator version. Its features include a  
16"x24" Lytron Heat Exchanger, 6  
fans, a pump, hoses and reservior.  
\$1500-\$2500 depending on bells  
and whistles.

Laser Dreams, PO Box 1514,  
Sebastopol, CA 95473;  
707-823-6104

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**DESIGNING THE FUTURE**

By Robin Baker (Thames & Hudson  
Publishers, New York, 1993). "An  
exhaustive survey of computation's  
impact upon and evolution through  
the arts...[N]ew arts have devel-  
oped and new technologies have  
grown from the hybrids: digital  
publications, genetic algorithms,  
interactive design and multimedia,  
neural networks, object-oriented  
programming, process data visual-  
ization, shape grammar and virtual

reality. "Designing the Future" also treats computing as a medium in its own right, using computation and design skills in tandem." — Kasey Rios Asberry

#### EXPLORATORIUM ON-LINE NEWS

ExploraNet, the Exploratorium's website, continues to grow, with new exhibits and on-line resources added nearly every week. 2 highlights: "Auroras: Paintings in the Sky" ([http://www.exploratorium.edu/learning\\_studio/auroras/](http://www.exploratorium.edu/learning_studio/auroras/)). These pages explore the mysterious aurora borealis, or northern lights. The site's self-guided lesson answers the most common questions asked about auroras and shows stunning images. "What's New in the World of Science" ([http://www.exploratorium.edu/learning\\_studio/news/](http://www.exploratorium.edu/learning_studio/news/)). Posted monthly, "What's New" keeps up with the latest developments in science. This on-line newsletter uses Real Audio technology to present audio interviews and lectures from noted scientists. <http://www.exploratorium.edu>

#### HYBRID CD-ROMS

i.e., titles which include online communications, links to expanded content, and/or network game play, are rapidly proliferating. Online connectivity is increasingly a feature that consumers expect. Common types of titles include: 1) Games with dial-up network multiplayer capabilities; 2) Reference titles and directories with online updates; 3) Entertainment and lifestyle titles with hooks to online forums and Web sites; and 4) Applications software, including more than 50 different Internet-specific programs, offering built-in connectivity, online upgrades, and/or remote technical support. InfoTech's *Hybrid CD-ROM/Online Assessment*, a comprehensive study of the worldwide market for hybrid CD-ROM/online titles, including analysis of publishing strategies, enabling technologies, and sales breakdowns and projec-

tions by subject matter, connection type, geographic regions, end-user market, and revenue streams through the year 2000, will be available in August 1996 for \$750 from InfoTech, 802-763-2097

#### INTERCOMMUNICATION CENTER (ICC)

ICC, a project of the Japanese telephone company NTT, will open a new electronic arts museum April 19, 1997 to celebrate NTT's 100th anniversary. It has a new address: **ICC, Tokyo Opera City Tower 4F, 3-20-2, Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-14, Japan; tel. +81-3-5353-0800; fax -0900**

#### KALA ART INSTITUTE

A nonprofit multicultural arts organization where art is both created and presented. Kala's 8500 square foot space in Berkeley includes a gallery, fully equipped printmaking workshop, letterpress facilities, an art archive, and a newly expanded electronic media center. Kala Art Institute's programs include artist-in-residence and fellowship programs, public workshops and classes, gallery exhibitions and performances, and youth and community programs. **510-549-2977**

#### MEDIA ALLIANCE

Offering courses in multimedia and Macintosh applications. **Media Alliance, 814 Mission St., Ste. 205, San Francisco, CA 94103; 415-546-6491**

#### MUSIC ANIMATION MACHINE

Videotape of animated musical scores. The music of Scarlatti, Byrd, Bach, Chopin, Webern and others, accompanied by a novel graphical score that can be understood without any musical training. Form, texture and melodic contour are revealed in this beautiful and precise representation. Stephen Malinowski presented this at Ylem's last Forum. 40 min., \$25 postpaid (\$22 ea. for multiple copies. Great gift!). Make checks to "Musical Animation Machine." **Music Animation Machine,**

**5876 Park Ave., Richmond, CA 94805; 510-235-7478; fax -7455; smalin@well.com**

#### NEW ADDRESS FOR YLEM WEB SITE

Ylem's *Art on the Edge* has changed servers! Note that the new address has no "www" in it. To find a list of the (off-site) Web pages of Ylem artists, go to Ylem's "Web Wonders" page. To find on site artists go to one of the two galleries. (Ylem folks: Is your Web site listed here? Contact [beverly@idiom.com](mailto:beverly@idiom.com)). Ylem links its site to these, so you can click and go to them. (Ylem requests that you artists also provide a link to *Art on the Edge*!) Write this down: <http://ac.org/ylem/>

#### NYC ACM/SIGGRAPH

Serving the New York City computer-graphics community; sponsors the Digital Salon exhibit. Fall/winter programs: Multimedia performance with musician Peter Gordon and video artist Kit Fitzgerald; joint event/screening with animation group ASIFA/East; Main Title Design program with the Visual Club; site visit to the studio of Rodney Alan Greenblat; Computer & Sex II. Annual dues: \$30 regular member or \$55 for 2 years; students \$20.

**NYC ACM/SIGGRAPH;  
V. Castleman, 60 Gramercy Park, #9A, New York, NY 10010; 212-626-0500**

#### THE RUTH ASAWA FUND

Ruth Asawa, San Francisco sculptor and founding member of Ylem, says: "Before I began work in the schools I asked my mentor, Buckminster Fuller, what I should do in education. He said, 'You create an environment and learning will take place. Work directly with the children.'" Help the Ruth Asawa Fund to promote innovative arts education in San Francisco schools; empower students, parents and community members to work directly with children in the

classroom; and establish an endowment to bring in eminent scholars and master artists. "For our grandchildren's grandchildren."

**The Ruth Asawa Fund, 1116 Castro St., San Francisco, CA 94114; 415-642-1491; fax -7578**

#### X-FACTOR ONLINE CONFERENCE

X-Factor, the national coalition for the advocacy of experimental media, has begun an Online Conference concerning the state of experimental film and video. It is responding to the near elimination of public and private funds for the production, exhibition and distribution of their work. The experimental media community straddles the unpleasant chasm between extinction and complete absorption by such corporate entities as advertising and music videos.

<http://thecity.sfsu.edu/users/>

## opportunities

### XFactor

#### DEADLINE NOVEMBER 1 10TH NATIONAL COMPUTER ART INVITATIONAL

Purchase awards. Open to US artists. All media created/generated by computers. \$20/up to 10 slides. Show opens in Jan. Send \$20, slides, SASE to: Friends of the Gallery, Gallery of Art MS-102, Eastern Washington Univ., 526 5th St., Cheney, WA 99004; 509-359-2493; fax -7028

#### DEADLINE NOVEMBER 1 HARVESTWORKS DIGITAL MEDIA ARTS

Open to multimedia artists and composers. "Submit projects to produce a new work in our production studios which feature a Pro Tools digital audio editing system, Media 100 video editing system and a multimedia lab." 20-40 hours of studio time with profes-

sional technician.  
Harvestworks Digital Media Arts, 596 Broadway, #602, New York, NY 10012; 212-413-1130, x. 10

**DEADLINE NOVEMBER 1  
WOMEN IN PHOTOGRAPHY**

"An exhibition of photography and photographically derived images exploring the creator's cultural background or heritage." Photos created after 1994. Send 10 slides, slide list, optional supporting materials, SASE to "Women in Photography" exhibit, Robert Oppenheim, Director, Trustman Gallery, Simmons College, 300 The Fenway, Boston MA 02115; 617-521-2480; fax -3172

**DEADLINE NOVEMBER 4**

**INTERNATIONAL ART SPECTACULAR**

Planetary Renaissance. Open to artists 18+. 2D and sculpture completed in last 3 years, max. 60" width w/ frame and max. 150 lbs. \$25/up to 4 slides, \$5 each additional, max. 12. Show Dec. 3-23, Landmark Center; to 10 artists' work shown Apr. 3-30, Hawaii. 40% commission. No insurance. Pros.: SASE to Barry Dyer, Planetary Renaissance, 7964 Brooklyn Blvd., #393, Brooklyn Park, MN 55445; 612-552-0092

**DEADLINE NOVEMBER 13**

**SIGGRAPH 97**

Conference on computer graphics and interactive techniques to be held in Los Angeles Aug. 3-8 (exhibition Aug. 5-7). Deadlines: Proposals for Panels, online Nov. 13 (final Jan. 15); Courses, Dec. 11; Educators' Panel, Jan. 8; Papers, Jan. 15; Electric Garden, Jan. 29, 1997; Fine Arts Gallery, Feb. 12. Get all the details! SIGGRAPH '97 Conference Management, % Smith, Bucklin & Asso., 401 N. Michigan Ave., Chicago, IL 60611; 312-321-6830; fax -6876; Internet: [siggraph97@siggraph.org](mailto:siggraph97@siggraph.org)

**DEADLINE NOVEMBER 30  
27TH NATIONAL EDUCATIONAL MEDIA NETWORK COMPETITION**

Films, videos, CD-ROM work (due Nov. 1). Over 140 submission categories including science and technology, animation/experimental. National Educational Media Network, 655 13th St., Oakland, CA 94612; 510-465-6885; fax -2835

**DEADLINE NOVEMBER 30  
ARTS & SCIENCES**

"Open to all mixed-media artists whose work is inspired by alchemy, astrology, astronomy, biology, chemistry, neurology, physics, psychology, and computer or video technology." Show Jan. 17-Feb. 17. Insurance. No fees. Send up to 20 slides (labeled with name, medium, size, title) in slide sheet, with cover letter describing proposed work and any special installation requirements, resume, SASE to Cathy Robohm Wakins, Director, The Mariboe Gallery, Peddie School, PO Box A, Hightstown, NJ 08520; 609-490-7559

**DEADLINE NOVEMBER 30  
INTERNATIONAL ICARUS 96**

\$4,000+ cash awards. Theme: Experiments in Flight. 2- and 3D media, ready to display. \$15/1 entry, \$25/2, juried from actual work. Show Dec. 3-28, Glenn Eure's Ghost Fleet Gallery. No insurance. 35% commission. International Icarus Committee, 210 E. Driftwood St., Nags Head, NC 27959; 919-441-6584

**DEADLINE DECEMBER 1  
JAPAN FOUNDATION**

For the pursuit of self-directed research projects in Japan.  
**EAST OF THE ROCKIES:** The Japan Foundation, 152 W. 57th St., 39th fl., New York NY 10019; 212-489-0299;  
**WEST OF THE ROCKIES:** The Japan Foundation, 2425

W. Olympic Blvd., #620-E, Santa Monica, CA 90404; 310-449-0027

**DEADLINE DECEMBER 1  
SHORTFEST**

Short films. Festival in February. Aspen Filmfest, PO Box 8910, Aspen, CO 81612; 303-925-6882; fax 9570

**DEADLINE DECEMBER 13  
1997 GOLDEN GATE AWARDS COMPETITION**

Animation, documentaries, shorts, experimental film/video/TV. Winners presented during 40th San Francisco Internat'l Film Festival, Apr. 24-May 8. 35 categories.

40th San Francisco Internat'l Film Festival, 1521 Eddy St., San Francisco, CA 94115; 415-929-5000; fax 921-5032

**DEADLINE DECEMBER 15  
IMAGINA 97**

Held in Monaco, Feb. 19-21. Enter any audiovisual or film work with at least one sequence of computer graphics or digital special effects. Categories include: Virtual Communities, 3D Conceptual Representation, Worlds and Models, Animation and Special Effects.

INA-Imagina, 4 ave. de l'Europe, 94366 Bry-sur-Marne, France; tel. 011-33-1-49-83-26-93; [lydia@imagine.ina.fr](mailto:lydia@imagine.ina.fr)

**DEADLINE DECEMBER 31  
THE NATURE OF TIME AT THE END OF THE MILLENIUM**

Photo-based media "including electronic, installations, and written articles that rethink the narrative depiction of time as a series of connective moments. The project will focus on the multiplicity and relativity of time and space in relation to cultural, political, and spiritual activities." Postmark deadline. Pros.: SASE to "Time" Call, CEPA Gallery, 700 Main St., 4th fl., Buffalo, NY 14202; 716-856-2717; fax -2720

**ongoing**

**ARTBEAT**

National Public Radio has launched a new weekly show on arts and culture. Artbeat promises broad coverage of all arts disciplines, high and low, from opera to TV, from rap to the novel, from printmaking to interactive media. If you have topic or art work that you think the program should cover, sent to: Artbeat, 925 Tyson Dr., West Chester, PA 19382; 800-922-9683"

**CONFLUENCE/COLLISION?**

An online symposium on the *Colophon Journal*, part of Colophon Page Internet Marketplace for Modern Illustrated and Fine Press Books. How have the computer and the Internet affected your work in self-expression, commerce and confusion? What's ahead for the Artists' Book? It explores the traditional book technologies and new digital media and invites your thoughts on 1. Copyright 2. Archival quality 3. Authorship, Aura, Authenticity 4. Artistic Production 5. Interconnectivity 6. Verisimilitude 7. Distribution. An ongoing project that may result in a "publishable document" (format to be determined). Email or fax your contribution to:

Michael von Üchtrup, *Colophon Page*, fax 212-724-7690; [jhw@interport.net](mailto:jhw@interport.net); <http://colophon.com>

**SECOND ANNUAL ART MONEY TOUR**

Start surfing for money on the Web. *Tour* features a wide range of funding sources including Foundations & Corporations; Government Agencies; Arts Services Organizations; Gifts-in-Kind; Trends, Nuts & Bolts; Advice; Online Fundraising and more! Each tour stop is organized by topic and includes a narrative description. Located on:

Arts Wire at <http://www.artswire.org/Artswire/www/awtour/money/page1.html>

**the media and processes of printmaking are particularly appropriate for the application of new technology applications.** The use of computers affords the artist-printmaker, on the one hand, an unprecedented variety of techniques, approaches, and working methods—a new repertoire of media and processes—and on the other, a variety of methods by which production and decision stages can be rendered more efficient and more effective. The explosion of desktop colour computer development has put a dazzling set of visual tools at the service of individual fine artists. For some it is still only a design tool; for others it is a means of producing work that is then displayed as some form of hard copy. The problem of generating hard copy still fascinates artists and it has led to some interesting solutions. In printmaking this is usually achieved through a photo-stencil into a more traditional technique, such as etching, lithography and screenprinting. The most recent development has been in the technology of output: converting the on-screen image to a physical form while retaining its richness of colour, detail and texture.

**my own personal work has developed in the last twenty years according to a rigorous programme of formal experiment.** In many respects my work has remained consistent for a long time; the size, the shape of the print, for instance, identical. Within this regular field, regular shapes form relationships, according to rules that determine their size, position and colour. At first these relationships were concerned only with the surface of the work: illusions of depth or movement were explicit as illusions, by systematic grid arrangement and symmetry of the overall design. Sometimes perspective is incorporated into the work, so that the arrangement could be read as a depiction of a space with depth, although never as a 'scene': the space depicted existed solely in the work. The most recent prints are designed to raise questions about the surface itself. The prints are made of paper, coloured. If anything is represented on them it is coloured paper, with folds, angles and creases suggested, but at the same time contradicted by the arrangement of colours, lines, and tones. The intention, as always, is to provide an arena in which the eye can be stimulated and pleased, while the mind can exercise its right to accept or reject the illusions offered and withheld. Each print is of course a complete image, but when viewed in groups, or as a series, the prints can be seen as stages in a continuous process of transformation, from point to point, constantly polymorphous process, whose identity as a process is maintained by my preference of tonal, chromatic and formal combinations.

**over the past eight years i have become increasingly interested in new technological methods of reprographics, information and computer-generated imagery.** This allows me to discover creative and surprising solutions to problems. The memory and speed and network of options allow new thought processes to be explored and discarded painlessly as the ideas take shape, develop and germinate. These exciting mediums liberate eye and hand.

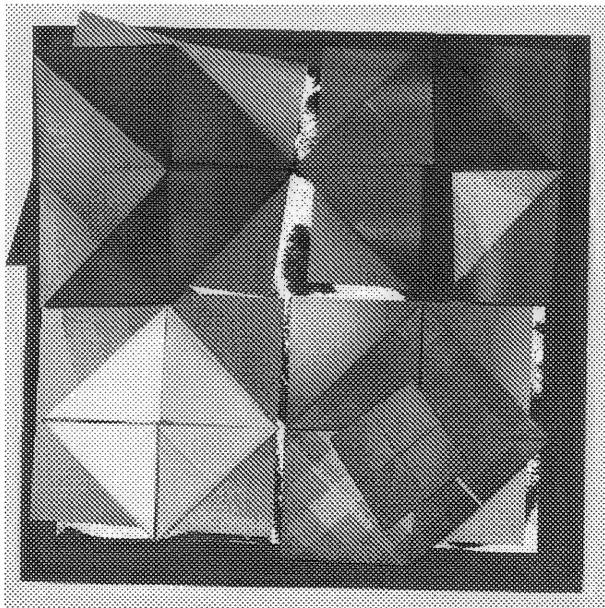
**sue gollifer**

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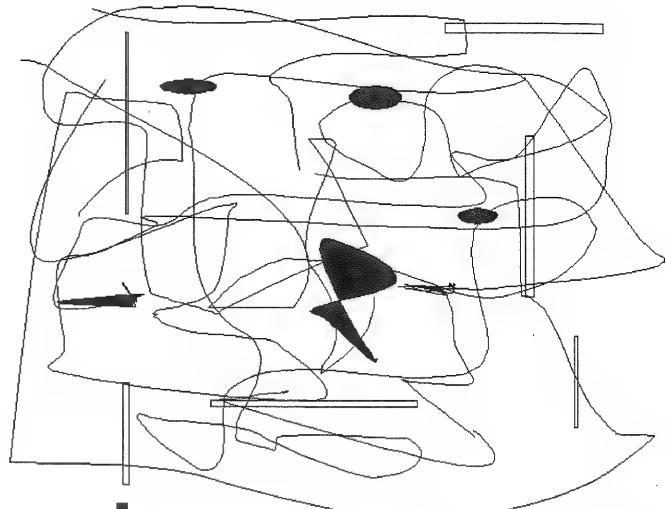
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**the application  
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GEORGE SHORTESS CHAOTIC FACES

## i

In the scribble drawing, *Chaotic Faces*, it is fairly easy to see a frontal face and several profile views of human faces. This tendency to impose meaning on a somewhat chaotic visual array has been called the perceptual imperative. It is an example of the active nature of perception. For a fuller discussion see *The Language of Visual Art* (1989, Holt, Rinehart and Winston, Inc.) by J. F. Meyers. Faces seem to be particularly important stimuli. If some essential elements of a face, such as the eyes, nose or mouth, are suggested in an otherwise meaningless visual array, there will be a tendency to impose the idea of a face on the perception of the array. Of course other objects might be found as well. With further looking you might see some tree or flower forms suggested by the line patterns, although the face still seems to be a dominant feature.

However, because perception is so automatic we sometimes think of it as a passive process. The stimulus energies from the world strike our receptive surfaces and we perceive the world around us. For example, light energy strikes the retina or mechanical vibrations move the organ of corti in the ear, and we simply see or hear what is out there in reality. And while that is true as far as it goes, it is very incomplete. Perception is also an active process of seeking out meaning in the stimulus array.

We accomplish this active interaction with the environment in a number of ways and at a number of different levels. At one level, the vast array of neural responses to the energy in the environment interacts in exceedingly complex ways in the nervous system, resulting in the selection and organization of these signals into meaningful representations of the perceived external environment. This perception is very closely driven by the stimulus input when we are looking intently at an object. At other times it is very loosely associated with external stimulation as in dreams. For further reading about the functioning nervous system, a number of good books are available. One recent text is *Neuroscience: Exploring the Brain* (1996, Williams & Wilkins) by M. F. Bear, B. W. Connors and M. A. Paradiso.

# perception as action

At a second level, we recognize that these perceptual processes, based in neural activity, direct our behavior such as movements of the eyes, head or whole body to get a better look at the world or to ignore certain inputs. Eye movements are the search engines for visual perception. Evidence from many eye movement studies shows that the eyes tend to focus on areas of high information content. This is clear in the early work by Buswell and later by Yarbus. A more recent discussion of the role of eye movements in the perception of art can be found in the journal *Leonardo*: C. F. Nodine, P. J. Locher and E. A. Krupinski (1993), **THE ROLE OF FORMAL ART TRAINING ON PERCEPTION AND AESTHETIC JUDGEMENT OF ART COMPOSITIONS**, vol. 26, pp. 219-227. So while we typically do create a world based in a common perception of reality, we are selective and each of us can pay attention to different aspects of the same environment. There is not complete relativism in our perceptions, but there are processes of selection and interpretation that we bring to the situation. In this sense, each person's perception involves both elements common to everyone in the situation and elements that are uniquely his or her own.

This relationship and interaction between our inner perceptual processes and external reality have been a major focus of my art work over the past 15-20 years. The emerging technologies of computers and electronic music have provided the tools that have allowed me to develop interactive installations and environments that speak to the fundamental questions of how and why we experience a world with a self that is simultaneously involved and detached. This kind of art makes use of the computer as a tool in which viewers manipulate the environment and are partners with the artist in creating aesthetic experiences.

To illustrate, I will describe a recent piece, **DOORWAYS OF MEANING**, which was shown at the Rene Blouin Galerie in Montreal, Quebec, Canada and as part of the 25th Juried Show at the Allentown Art Museum, Allentown, PA. An impression of the view in the gallery is provided in the illus-

tration. It has a very organic look. In Montreal, the gallery was approximately 16 feet wide and 20 feet long. It was hung with red and green cord networks, forming spaces that allowed people to move throughout the room creating doorways among the cords as they went. Around the boundary between the floor and the walls were eight photocells embedded in shredded paper. Light from red and green spotlights in the ceiling shone on the photocells. Viewers moving in the room cast shadows on the photocells and changed their resistances. The microcomputer was continually monitoring the photocells. When changes occurred, it was programmed to send MIDI signals to a sampler, a drum machine and a synthesizer. The audio outputs from these devices were then mixed and played through the speakers in the room. The sampler was loaded with eight voice samples that spoke to the nature of experience and the metaphor of doorways as the interfaces between inner experiences and external reality. Half of the voice samples were in English and half were in French, as a tribute to the bilingual city of Montreal. Half were male and half were female. In Allentown the arrangements were similar except that the room was 11.5 feet wide and 28.5 feet long. The photocells were mounted on a built-in shelf that was about 2.5 feet above the floor and were activated by light from the ceiling that was reflected from the walls. Also, all the voice samples were in English.

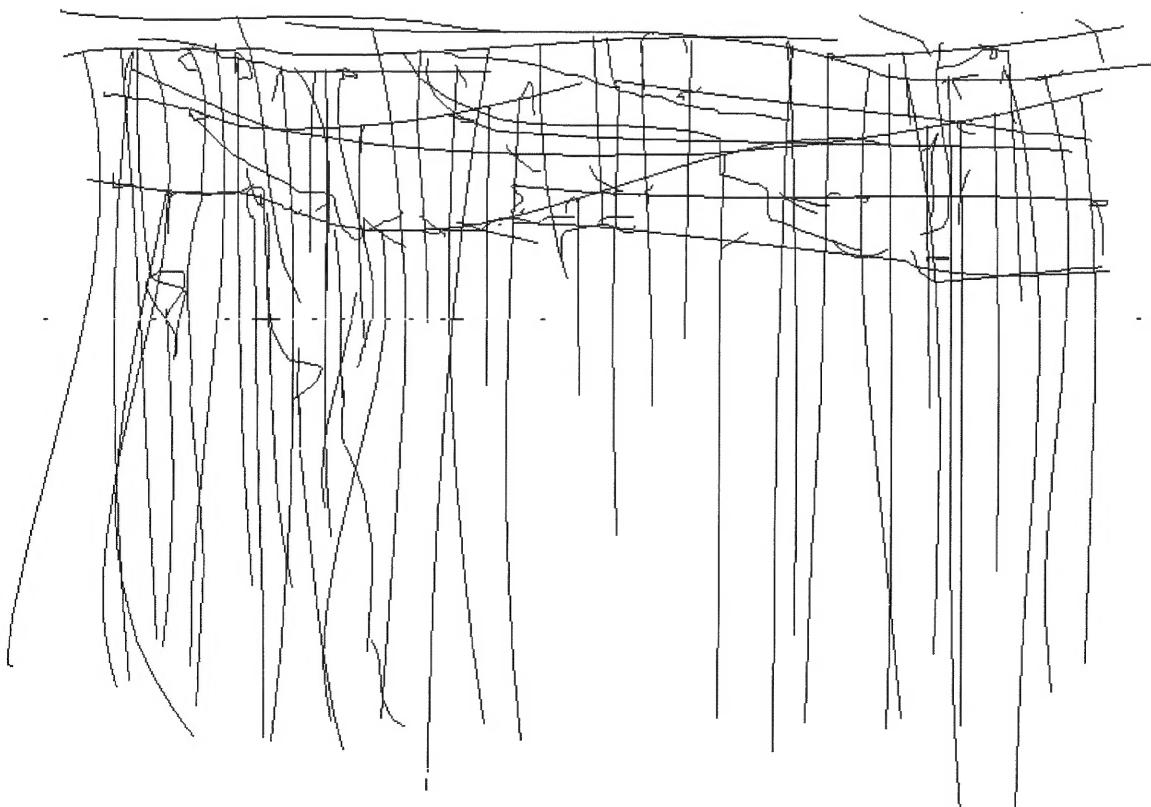
In both installations, people moved around and through the cords, creating shadows on the walls and individual patterns of voice, percussion and electronic music. For example, by moving rapidly, a babel of sound could be created which could fade out to a single voice when the viewer stopped. Some people varied their speed and moved their arms. Others moved very slowly and meditated. While all seemed to understand that their movements caused the sounds, several tried to work out certain regularities in the pattern

and tried to understand how it worked. Some expressed the belief that moving the cords caused the sound. Others seemed to just accept the relationships between movement and sound, and developed their own expressive experience. Some found areas and movements that were relaxing, while others found a resolution in the auditory activity that they generated in special places in the installation.

Perceptually they were drawn into a somewhat chaotic environment. In this situation they began to try to organize and make sense of the confusing situation, an example of the perceptual imperative. Because of the complexity and ambiguity of both the visual and auditory stimulation, it was more difficult than seeing a face in *Chaotic Faces*.

The content of the piece is the process of creative engagement by the viewers. In one very real sense the physical object is not the work of art. It is only an environment in which a work of art can occur. The perceptual, cognitive and emotional processes taking place in the viewers are the works of art. This is a challenge for the traditional approach to art, since the work becomes much less accessible when it resides within the viewer rather than on a gallery wall. But that is a topic for another discussion.

One of my major goals in these works is to create pieces in which viewers must become involved in ways that challenge them to be more active and creative as they perceive art and more generally their own life experiences. Perception becomes action. If we think about perception only as the passive reception of information, we limit our own potential for a fuller life. The value of the technology is that it allows for real time interaction that is essential in accomplishing these goals. This form of art using technology has the potential for providing a liberating force in our lives.



GEORGE SHORTESS IMPRESSION OF DOORWAYS OF MEANING

Photography for me is exploration, dialogue, discovery in which the technology of the camera is a prime participant. The delicate interaction of seeing and insight which is fostered by camera, lenses, light and film is at the heart of the images in "Layered Worlds: The Look of Alzheimer's." As a daughter whose mother had lived with Alzheimer's disease for 10 years, I understood much about the experience of Alzheimer's from the outside looking in.

In my photography I chose not to photograph the victims of the disease. This was not the look I wanted to portray. Rather I wanted to convey visually what the experience of the disease felt like, to communicate in-sight for myself, for others who had experienced the disease at close range, for caregivers and family members who would bring their own worlds to the images.

When I tried to describe the experience of the disease I found myself talking about moving in and out of layers of time. Today might be yesterday or 20 years ago to the Alzheimer patient. Today I might be known as daughter or cousin or friend; tomorrow I might not be recognized.

# through the camera to insight

It was from that vantage point that I set out with camera, lenses, tripod and film to discover, to engage in dialogue. Shallow depth of field, one single edge of a leaf in sharp focus and all else a blur, this is the world provided by the technology of aperture and telephoto lens. The "one sharp edge of the leaf" becomes the moments of recognition when there is a focus, when patient can recognize a familiar face, when caregivers catch glimpses of familiar traits. All else is blur, but there is one defining moment of clarity.

A world of engaging impermanence, of chaos and blur, is seen uniquely by the camera. Blurring vision can be frozen in time, a three dimensional world must be seen in two dimensions, depth of space is foreshortened by lens. A carousel enjoyed for what it is begins to speak of dizzying blur. Stationary horses appear to be moving in all directions. The "craziness" of the disease, the pace of life which seems to be out of control, the clash of future, present,



past are seen in carousel images in which slow shutter speeds capture the dizzying pace and foreshortened depth presents a collision course for set horses.

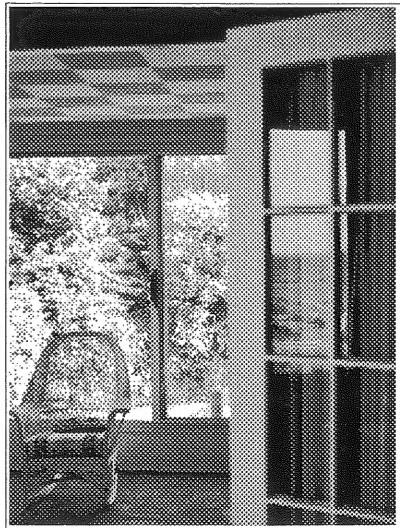
These images were for people like myself, people who had known the disease at close range. These images would not only convey the feel of the disease, they would celebrate a life, a life whose rich layers were now confused but whose layers in all their richness, in all their deficiencies, must be affirmed.

Note: "Layered World: The Look of Alzheimer's," an exhibit of color photographs by Ann Grady, C.S.J. has been exhibited at the Carney Gallery, Fine Arts Center, Regis College, Weston, MA (Spring '94); at the Borgia Gallery at the College of the Elms, Chicopee, MA (Winter '95); and in the Main Gallery of the Newton Free Library, Newton, MA (Summer '96). The entire exhibit contains 27 images presented in 5 series: Leaf Series, Cranberry Series, Carousel Series, Window Series, and A Celebration of Layers.

**ann grady, csj** ©  
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ON LEAVES



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**TRUDY MYRRH REAGAN**  
YLEM FOUNDER  
**LARRY SHAW**  
THE EXPLORATORIUM

## ADVISORY BOARD

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**JAMES THOMPSON**  
LOCKHEED MARTIN  
MISSILES & SPACE CO.  
**ROBERT GELMAN**  
CREATIVE CATALYST

## YLEM YEARLY MEMBERSHIP INCLUDES:

## MEMBERS DIRECTORY:

An annual publication in which you are listed along with approx. 250 other artists of new art forms

## NEWSLETTERS:

The bi-monthly Ylem Newsletter contains articles on numerous topics along with news of members, a calendar of events and art opportunities

## FORUMS:

Ylem presents bi-monthly Forums at San Francisco's Exploratorium, curates art shows, and arranges special site visits.

## HEALTH CARE INSURANCE:

Members are eligible for a group health care program

## NEW! YLEM SLIDE REGISTRY

An opportunity to join our Member's slide registry. The registry is presented to curators by the Ylem Exhibits Committee. An initial fee of \$15.00 (\$5.00 annual renewal) is charged to cover the preparation of professional-level presentations.

## NEW! ELECTRONIC MEMBERSHIP OPTION:

On-line members receive their Directory and Newsletters via the internet (paperless).

## YLEM'S GALLERY ON THE WORLD WIDE WEB:

An opportunity to exhibit your work in our Web site  
"Art on the Edge." <http://arc.org/ylem/>

## PLUS:

Group exhibits and informal get-togethers.

## MAILING LABELS

of Ylem members  
(about 250 artists & art enthusiasts)  
are available to Ylem members for \$20.  
Info: Beverly Reiser 510-482-2483  
or send \$20 with your request to:

**YLEM**  
PO BOX 749, ORINDA, CA  
94563, USA

<b>YEARLY MEMBERSHIP RATES</b> <ul style="list-style-type: none"> <li><input type="radio"/> <b>U.S. INDIVIDUAL \$30.</b></li> <li><input type="radio"/> <b>U.S. INSTITUTION \$45.</b></li> <li><input type="radio"/> <b>U.S. STUDENT OR SENIOR \$20.</b></li> <li><input type="radio"/> <b>ELECTRONIC NEWSLETTER \$20.</b></li> </ul>	<input type="radio"/> <b>PLEASE SEND A SAMPLE NEWSLETTER TO (ME)(MY FRIENDS) AT:</b> _____  <input type="radio"/> <b>PLEASE PROCESS MY MEMBERSHIP TODAY. ENCLOSED IS THE FOLLOWING INFORMATION AND MY CHECK.</b>  <b>NAME:</b> _____ <b>BUSINESS NAME:</b> _____ <b>ADDRESS:</b> _____  <b>TEL: (HM)</b> _____ <b>(B)</b> _____ <b>FAX:</b> _____ <b>E-MAIL:</b> _____ <b>DESCRIBE YOUR WORK/INTERESTS IN THIRTY WORDS OR LESS</b>      
	<small>CANADA/MEXICO ADD 5 U.S.\$ TO U.S. RATES; ALL OTHER COUNTRIES ADD 15 U.S.\$ TO U.S. RATES. (U.S. CURRENCY ONLY PLEASE).</small>

# YLEM

P.O. BOX 749  
ORINDA, CA  
94563 U.S.A.



## CONTACT INFORMATION

### YLEM MAIN OFFICE

P.O. Box 749  
Orinda, CA 94563  
[beverly@idiom.com](mailto:beverly@idiom.com)

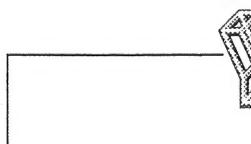
### YLEM NEWSLETTER ITEMS

TRUDY MYRRH REAGAN  
967 Moreno Avenue  
Palo Alto, CA 94303  
[Trudymyrrh@aol.com](mailto:Trudymyrrh@aol.com)

ADDRESS  
CORRECTION  
REQUESTED  
RETURN  
POSTAGE  
GUARANTEED

### YLEM'S ART ON THE EDGE WEBSITE

BEVERLY REISER  
6979 Exeter Drive  
Oakland, CA 94611  
[beverly@idiom.com](mailto:beverly@idiom.com)  
<http://www.ylem.org/ylem/>



n., pronounced

eye-lum, 1. is a Greek  
word for the exploding  
mass from which the  
universe emerged

is an international

organization of artists, scientists, authors, curators, educators, and art enthusiasts who explore the intersection of the arts and sciences. Science and technology are driving forces in contemporary culture. Ylem members strive to bring the humanizing and unifying forces of art to this arena. Ylem members work in new art media such as Computers, Kinetic Sculpture, Interactive Multimedia, Holograms, Robotics, 3-D Media, Film, and Video.